

Practitioner's Docket No. 12-0892

PATENT{PRIVATE }

#10 <sup>Cal B</sup>  
10.10.22

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Berger, Harvey L.

Application No.: 09/240,275

Group No.: 2634

Filed: 01/29/1999

Examiner: Kim, Heechul

For: ADAPTIVE DECISION REGIONS AND METRICS

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Technology Center 2600

Assistant Commissioner for Patents  
Washington, D. C. 20231

TRANSMITTAL OF FORMAL DRAWING(S)  
PRIOR TO NOTICE OF ALLOWANCE

Attached please find a letter to the official draftsman and the formal drawings for this application.

Date:

07/22/02

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CERTIFICATE OF MAILING (37 C.F.R. section 1.8(a))

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

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07/22/02

Lynn E. Cahiles

(type or print name of person mailing paper)

Signature of person mailing paper



TRW Docket No. 12-0892

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Berger et al. )  
Application No.: 09/240,275 ) Group Art Unit: 2634  
Filed: January 29, 1999 ) Examiner: Kim, Heechul  
Title: ADAPTIVE DECISION REGIONS )  
AND METRICS )  
)  
)  
)

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**AUG 16 2002**

**LETTER TO THE OFFICIAL DRAFTSPERSON**

**Technology Center 2600**

Commissioner for Patents  
Washington, D.C. 20231

Enclosed are eight sheets of formal drawings (FIGs. 1-13) for the above-identified case. These drawings should be substituted for the drawings currently on file. Please charge any drawing comparison fee to the Deposit Account of the undersigned (Deposit Account No. 20-1515).

Respectfully submitted,

Date: July 22, 2002

By: 

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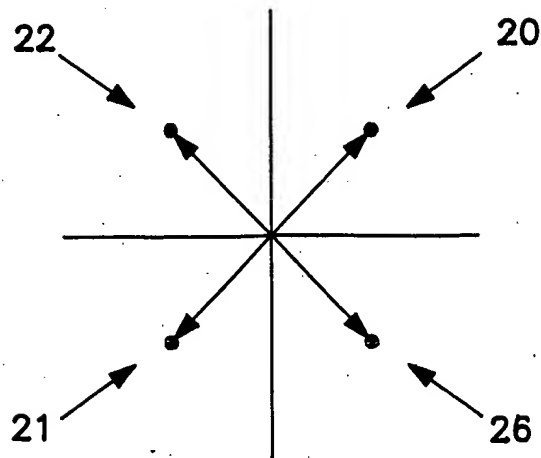


FIG. 1

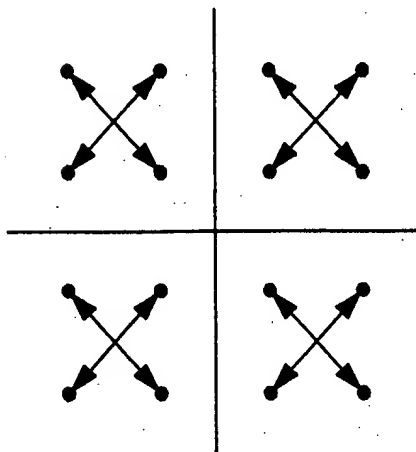


FIG. 2

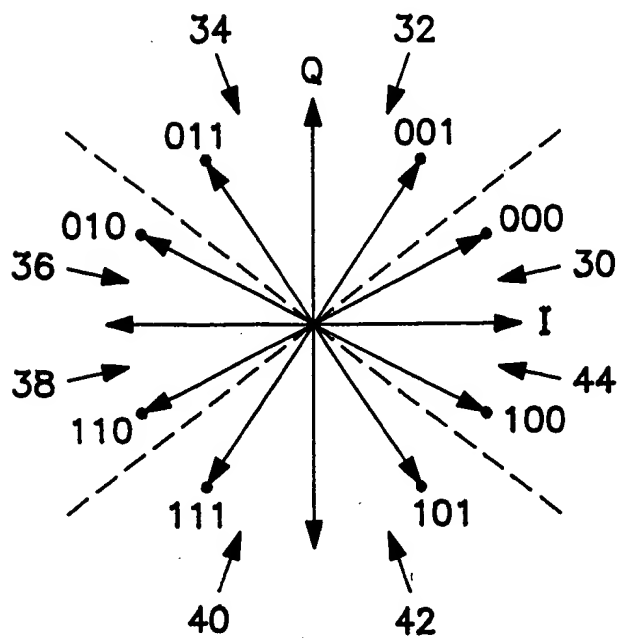
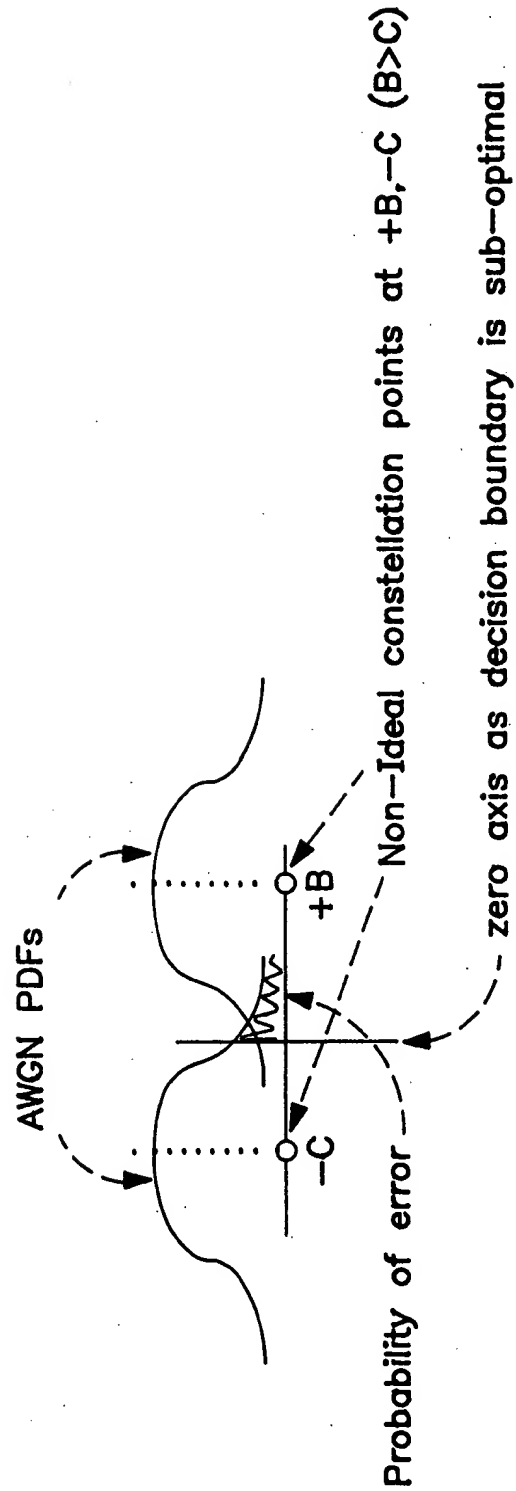
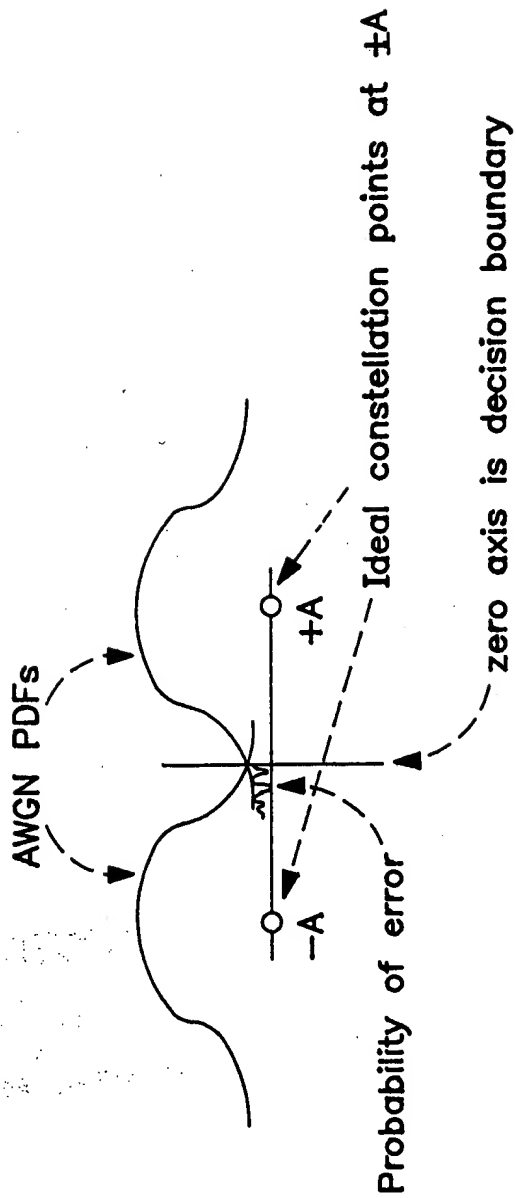


FIG. 3



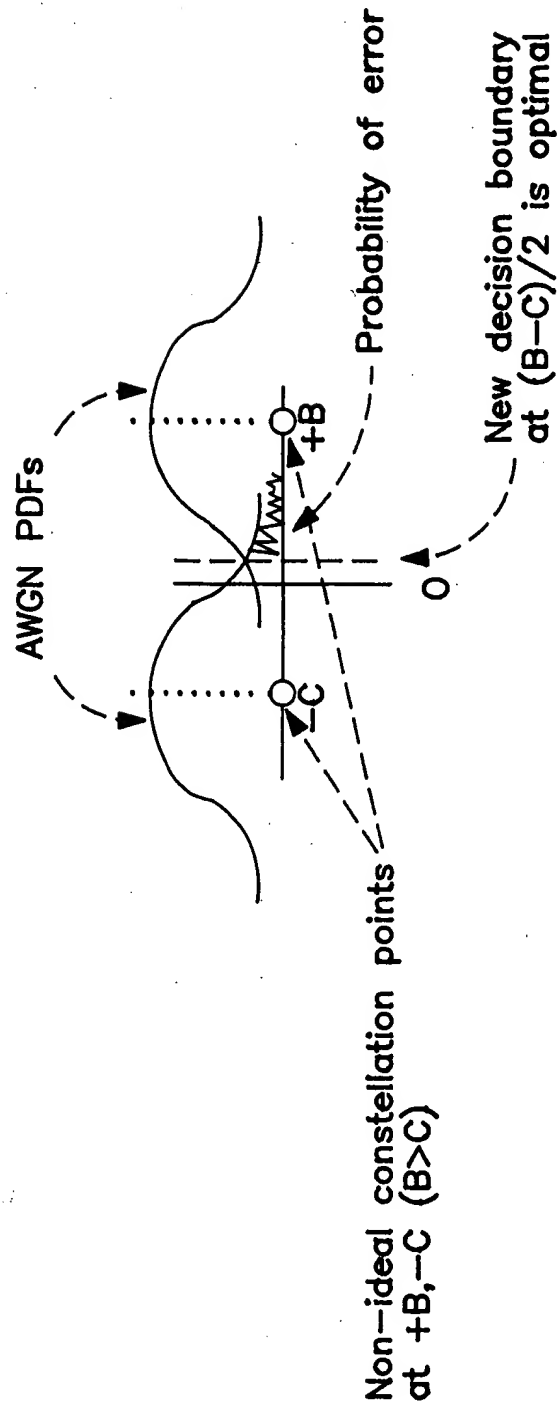
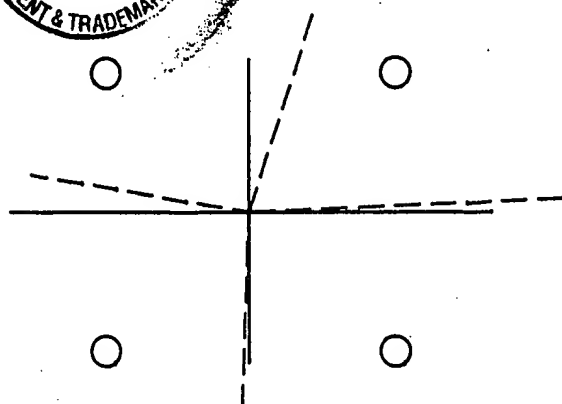


FIG. 6



Key

Ideal Constellation Points: ○

New decision boundaries: - - - -

ISI/Noise clouds:

Cloud centroids:

FIG. 7

Trellis Coded Modulation (Adaptive Decision Metrics)

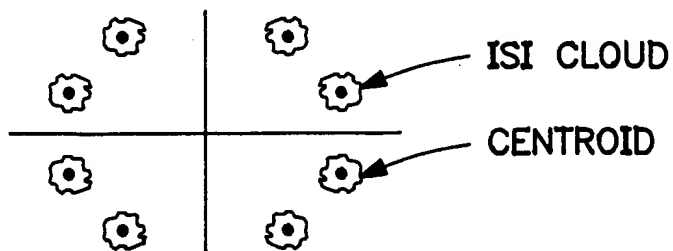


FIG. 8

8PSK (Adaptive Decision Regions)

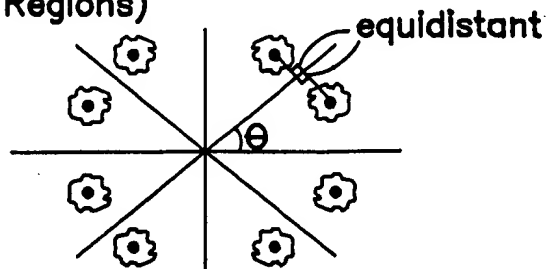


FIG. 9



Adaptive Decision Regions (PSK or QAM Modulations)

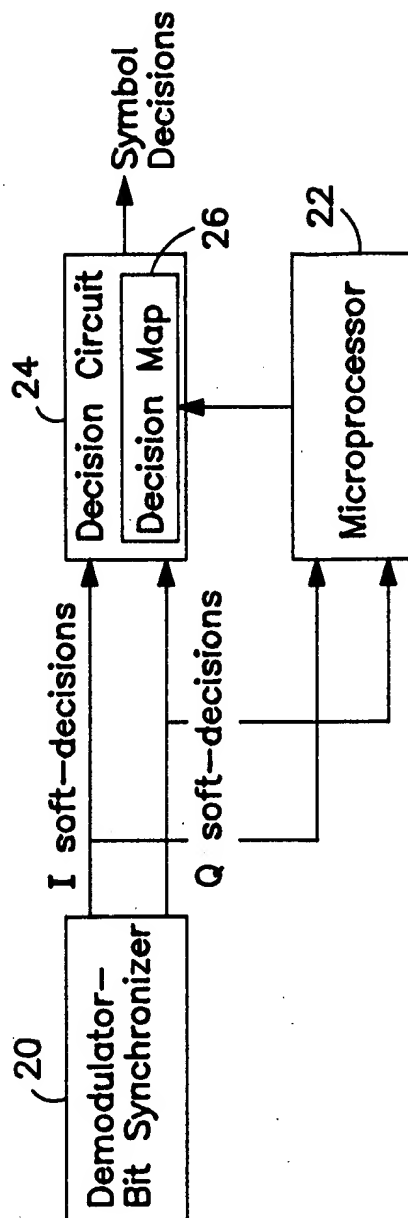


FIG. 10

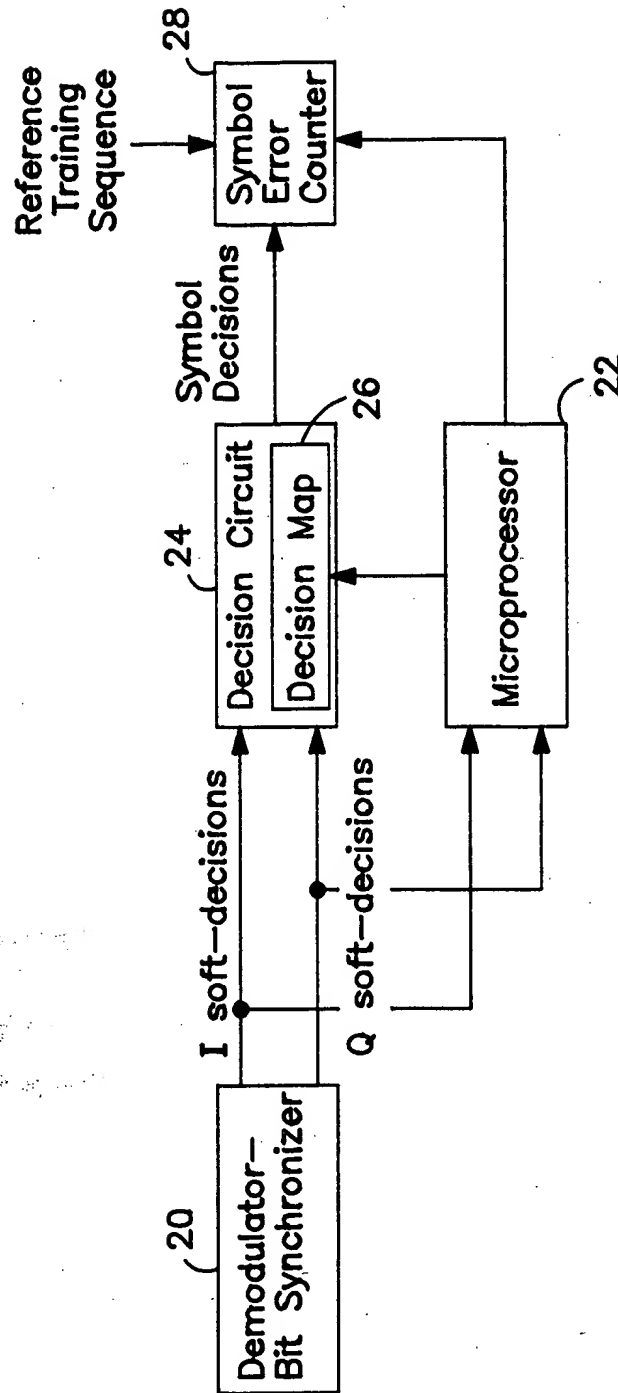


FIG. 11





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# Adaptive Metrics (e.g., Trellis Coded Modulation)

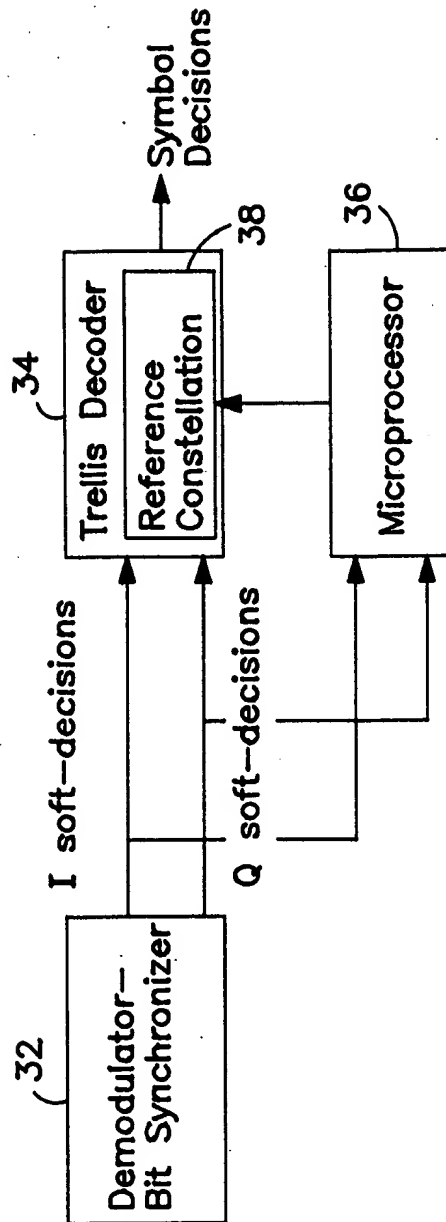


FIG. 12

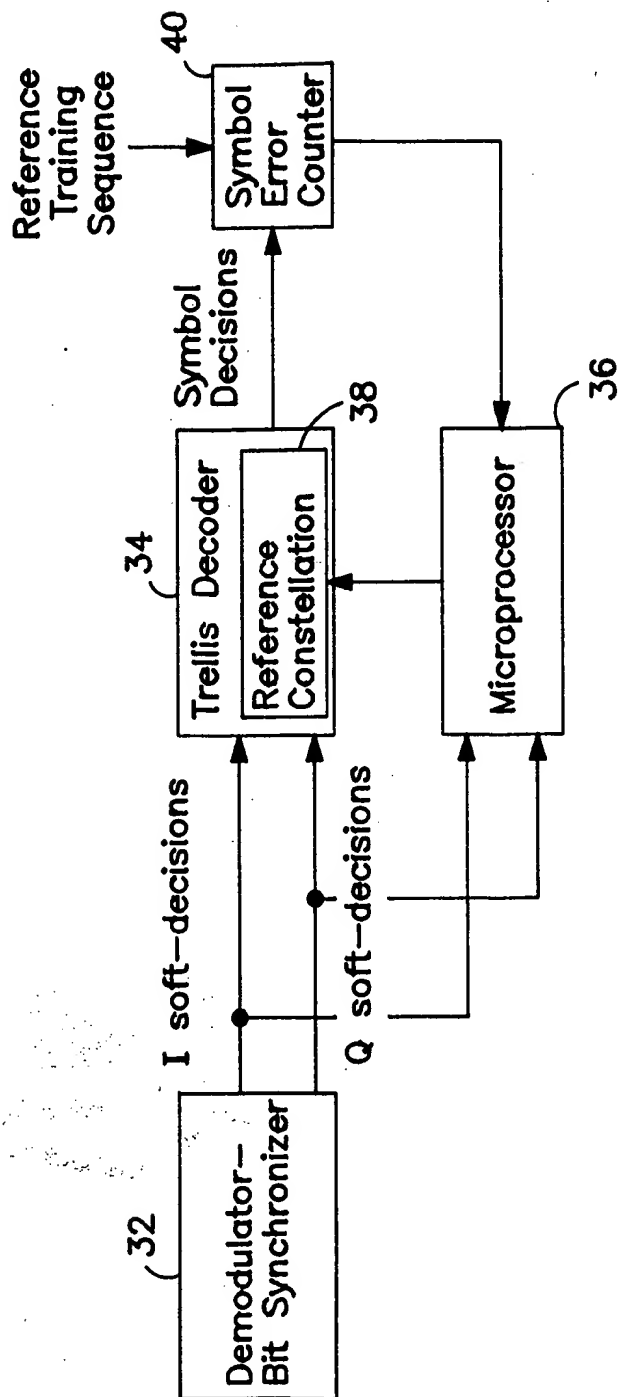


FIG. 13